

REMARKS

This Amendment, submitted in response to the Office Action dated December 14, 2007, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-13 and 15 are all the claims pending in the application. Claim 14 has been cancelled.

Preliminary Matter

Applicant notes that the Examiner has not initialed all of the references listed on the PTO Form 1449 filed on October 30, 2003. Therefore, Applicant requests that the Examiner initial all of the listed references and provide the Applicant with a signed copy in the next Office Action.

Claim Objections

The Examiner has objected to claims 9 and 10 due to minor informalities. The informalities noted by the Examiner have been fixed. Therefore, Applicant respectfully requests the withdrawal of the objection to claims 9 and 10.

Claim Rejections under 35 U.S.C. § 112

Claims 13-15 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. Claims 13 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claims 13 and 15 have been amended as indicated above. Claim 14 has been canceled. Therefore, Applicant respectfully requests withdrawal of the 35 U.S.C. § 112 rejections.

Claim Rejections under 35 U.S.C. § 103

Claims 1, 13 and 15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable by Rhoades (US 2007/0220232 A1) in view of Abdo (US 2004/0052257 A1).

Claim 1 recites:

A method of processing IP packets at layer three level in a telecommunication equipment, the equipment comprising a first box containing layer 4 protocols, and a second box containing hardware interfaces and layer 2 drivers, the method comprising the following steps in the following order, which are performed by a first termination block:

in the incoming direction:

validating IP packets by performing checks,

managing options field by interpreting all the options that said first termination block understands and preserving unaltered all other options ,

filtering,

deciding first next layer and forwarding;

in the outgoing direction:

managing redirect by checking if the packet that is going to be sent satisfies the following conditions:

the IP packet has been received from a same interface over which the IP packet is going out,

the source address belongs to a sub-network of a next-hop,

there is no source route option,

managing TTL by considering a valid packet any IP packet addressed to the equipment and with TTL equal to zero,

managing source address,

managing options field by interpreting all the options that said first termination block understands and preserving unaltered all other options,

fragmenting packets when the packet to be routed has a size greater than a Maximum Transmission Unit.

Claim 1 is directed to a method of processing IP packets at layer three level in a telecommunication equipment, the equipment comprising a first box containing layer 4 protocols, and a second box containing hardware interfaces and layer 2 drivers. There is no teaching or suggestion in Rhoades of equipment comprising a first box containing layer 4 protocols, and a second box containing hardware interfaces and layer 2 drivers as claimed.

The Examiner asserts that Fig. 8 of Rhoades discloses “in the incoming direction: validating IP packets by performing checks, managing options field by interpreting all the options that said first termination block understands and preserving unaltered all other options, and filtering.”

Fig. 8 of Rhoades discloses:

“[t]he overlap between packet processing and table lookup for a single processor. The processors synchronise with other processors and hardware accelerators via semaphores. In this example the global semaphores are used to keep the processors in step with one another but out of phase.

At any time, one processor is being loaded with data, another one is being unloaded, and all the processors can be processing and doing lookups. This allows continuous streaming to the processors from the Distributor and from the processors to the Collector. The lookup activity is spread over time in n phases from n processors and thus the Table Lookup Engine is used continuously.”

Applicant submits there is no teaching or suggestion of managing options field by interpreting all the options that said first terminal block understands and preserving unaltered all

other options as claimed. The Examiner points to "Identify Specialized Packets" and "Extract QoS Information" in Fig. 8 which merely illustrate an overlap of processor operations where specialized packets are identified and QoS information is extracted. However, there is no teaching or suggestion of in the incoming direction: validating IP packets by performing checks, managing options field by interpreting all the options that said first termination block understands and preserving unaltered all other options, and filtering, as claimed.

The Examiner asserts that the limitations managing TTL by considering a valid packet any IP packet addressed to the equipment and with TTL equal to zero, and managing source address, are inherent. However, in order to establish inherency "the extrinsic evidence **'must** make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Further, "in relying upon the theory of inherency, the examiner **must** provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

In the present situation, the Examiner has not provided a basis in fact or in technical reasoning and appears to be merely asserting the Examiner's personal reasoning in supporting the inherency argument. Therefore, the Examiner's rejection is deficient.

The Examiner concedes that Rhoades does not disclose managing redirect by checking if the packet that is going to be sent satisfies the following conditions: the IP packet has been received from a same interface over which it is going out, the source address belongs to a sub-network of a next-hop, there is no source route option. *See* Office Action, pg. 5. The Examiner cites Abdo¹ to make up for this deficiency.

Applicant notes that Abdo does not cure the deficiency of Rhoades. Further, there is no teaching or suggestion in Abdo regarding managing redirect by checking if the packet that is going to be sent satisfies the following conditions: the IP packet has been received from a same interface over which the IP packet is going out, the source address belongs to a sub-network of a next-hop, and there is no source route option, as claimed.

Therefore, Applicant request the withdrawal of the rejection of claim 1. Claims 13 and 15 contain features similar to the features of claim 1. Accordingly, they should be allowable for analogous reasons.

Allowable Subject Matter

The Examiner indicates that claims 2-6 are objected to as being dependent upon a rejected base claim but would be allowable is rewritten in independent form. At the present time, Applicant has not rewritten claims 2-6 in independent form since Applicant believes claims

¹ Applicant notes that Abdo (US 2004/0052257) does not qualify as prior art under 35 U.S.C. § 102. Further, Applicant notes that the filed priority document is in English. However, as a provisional application of Abdo discusses an ICMP redirect message which is cited by the Examiner for allegedly teaching claimed elements, Applicant has traversed the rejection.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/695,836

Attorney Docket No.: Q77975

2-6 will be deemed allowable, without amendment, by virtue of their dependency to claim 1 for at least the reasons set forth above.

Claims 7, 8, 11 and 12 have been allowed.

Claims 9 and 10 would be allowed if rewritten to overcome the objections set forth in the Office Action. Since Applicant has amended claims 9 and 10 as suggested by the Examiner, Applicant submits that claims 9 and 10 should now be allowed.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Ruthleen E. Uy/

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Ruthleen E. Uy
Registration No. 51,361

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: March 14, 2008